

State of Illinois

Dept. & Div. ILL EPA-MPLP Inspector Gary L. Mintz Date DEC 27 1983 Inspected 9/28/83

Mine Name FIDELITY MINE # 11 Mine Company FREEMAN UNITED COAL CO. MINE POLLUTION CONTROL PROGRAM

IEPA M & M Permit No. PROPOSED CA ISSUED Permit No. _____ County PERRY

General Location APPROXIMATELY 5 MILES WEST OF DuQuoin

Arrival Time 10 30 Weather Conditions HOT MOSTLY SUNNY

RECLAMATION TYPE (Check Appropriate Type)
Mine Includes Prime Land Yes/ No
Steep Slope Rule Applies Yes/ No
Coal Preparation Yes/ No
Not Applicable —

Reason for Visit: ROUTINE

Persons Contacted:
GLEN HAMILTON - RECL. SUP

PARAMETER CHECKLIST

1. Availability of: A — permits B — Plans
2. Imminent Danger to Public Health and Safety —
3. Significant Imminent Environmental Harm —
4. Signs and Markers: A. mine entrance B. perimeter C. blasting D. topsoil
E. perimeter observance 1. 100' zone 2. 300' zone F. permit area correlation
(G) not investigated H. not applicable
5. Disposal Spoil and Waste Material Outside Pit or Direct Cast Site: A. gob disposal:
1. site capacity 2. covering 3. vegetation B. within permit area C. site approved
D. slope of site E. steep slope rules F. valley fill or head of hollow fills:
1. permit area 2. location near ridge top 3. fill design 4. fill construction
5. steep slope rules 6. under drains 7. lateral drains 8. controlled placement
9. engineer inspection (G) not investigated H. not applicable
6. Soil Handling: A. removal before other disturbance B. storage C. protection
D. thickness E. root medium F. other overburden G. toxic material handling
H. root medium satisfactory for top soil replacement (slope, thickness, texture)
I. topsoil replaced J. grading current K. rills and gullies L. erosion control
systems M. timely revegetation and mulching (N) not investigated O. not applicable
7. Prime Land: A. prime land determination B. soil horizon removal prior to other
disturbance C. thickness removed D. approved horizon storage E. protection of
stockpiles F. horizon replacement and thickness G. protection of replaced horizons
H. grade (O) not investigated J. not applicable
8. General Water Quality and Hydrology: (A) waterways B. grading C. vegetation D. toxic
material E. horizontal bore holes (C) sediment ponds: 1. size 2. structure
3. spillway 4. clean out 5. over 20' high or over 20 acres foot storage (— yes/— no)
6. seepage (P) structural weakness (Q) discharge structure 9. chemical treatment system
9(a). permitted — yes/— no (R) discharge water quality H. buffer zone (100') observance
I. zone markers (S) NPDES permits required — yes/— no K. water quality L. not inves-
tigated M. not applicable

<input type="checkbox"/>	TEMPORARY REPORT
<input checked="" type="checkbox"/>	FINAL REPORT

cc: Dept. of Mines and Minerals

EPA Region 5 Records Ctr.



324300

(5/02/80)

- 9. Stream Channel or Other Water Diversion: A. temporary or permanent B. size adequacy C. stability D. gradient E. grade stability F. suspended solids G. sediment control H. channel design I. erosion control structures J. fish and wildlife protection K. vegetation L. removal of temporary structures M. structure removal procedures not investigated O. not applicable
- 10. Road Hydrology: A. culverts ditches C. location choice D. grade E. stream closeness F. ditch relief drains G. out slope drains H. construction material toxic/ non-toxic I. maintenance J. railroad spur hydrology K. vegetation L. not investigated M. not applicable
- 11. Impoundment Structures: A. M.H.S.A. construction observance B. coal waste in structure freeboard stability seepage F. engineer inspection G. dam marker H. maintenance I. ditch and spillways J. changes in geometry of structure K. not investigated L. not applicable
- 12. Steep Slope Procedure: A. spoil on outslope B. debris C. highwall removal D. disturbance above highwall E. excess spoil F. instability of spoil and woody material G. not investigated not applicable
- 13. Preparation Plant: A yes: 1. permitted yes/ no 2. closed water system yes/ no 3. discharge potential yes/ no B. no, raw coal shipped C. not investigated

LFGEND: = parameter inspected: = comment or question on the parameter

NOTE: Items circled were considered during this investigation. If nothing under a major item was investigated, circle either "not investigated" or "not applicable". Violation means violation or apparent violation

NO VIOLATIONS FOUND

SEE ATTACHMENT

Indicated Parameter			Comments Or Action Taken
No.	Check Column		
	Vio- lation	Non-Vio- lation	
GEN			
Comm		✓	
8F8		✓	
8G		✓	
8J		✓	
11D		✓	

ATTACHMENT

FREEMAN UNITED COAL COMPANY
Fidelity Mine #11
September 28, 1983

GENERAL COMMENTS: During the investigation, I was accompanied by Glen Hamilton. Mr. Hamilton and I observed that the installation of a "catwalk" across the channel of proposed discharge 002 has been completed (finally). This "catwalk" was installed because of the difficulty of obtaining a representative sample from the discharge.

Mr. Hamilton and I observed the old slurry area berm which received repair work after a breach in the berm occurred last May. The repair work appears to be stable, however, a vegetative growth has not as yet been established.

Mr. Hamilton also said that a special pump has been purchased to be used to pump water from the "moat" (surface runoff from the out slopes of the gob pile) to the slurry system. The pumping operation should reduce the threat of any more breaches in the old slurry area berm.

8. F. 8.: I observed the area around the discharge structure of proposed pond 005. The area has received some rip-rap.

8. G.: During the investigation, I obtained an effluent sample and prepared and shipped it to the Champaign Regional Office laboratory for analysis. The results of the analyses are listed below:

Sample #1: obtained from the "catwalk" above the channel that receives discharge waters from the site which has been proposed as discharge 002. The water sample was clear and water was flowing through the channel at an undetermined rate.

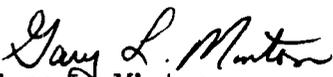
LAB. #B013498

T. Iron	0.2 mg/l	Suspended Solids	8 mg/l
Manganese	0.23 mg/l	Alkalinity	249 mg/l
pH	8.0	T. Acidity	0 mg/l

According to Mr. Hamilton, more rip-rap will be brought in to stabilize the embankments.

8. J.: This site has been operating under a proposed Construction Authorization issued December 2, 1982 with a supplemental C.A. issued January 19, 1983. Under Agency guidance, all discharges are being monitored and Discharge Monitoring Reports submitted. Some late modifications to existing applications for changes in mining operations have delayed issuance of the NPDES permit.

11. D.: I observed where repair work on the current slurry impoundments out slopes has been completed. Sloughing of the out slopes occurred after numerous and sometimes heavy precipitation events occurred last spring.


Gary L. Minton
Environmental Protection Agency

GLM:mgg
12/21/82

cc: Dept. of Mines and Minerals
F.O.S./MPCP

SAMPLE #1

WATER QUALITY AND WASTE TREATMENT WORKS EFFLUENT SAMPLING FORM ENVIRONMENTAL PROTECTION AGENCY

11 LINE

SAMPLE COLLECTED BY

FOR LABORATORY USE ONLY

JERRY L MINTON

SAMPLE RECEIVED BY

DATE RECD SEP 30 1983 TIME REC'D 2P

SAMPLING LOCATION

DATE ANALYSES COMPLETED

DATE RESULTS FORWARDED OCT 24 1983

FIDELITY #11

POND 002

TOTAL TESTS REQUESTED TESTS RUN

BASIN/SUB BASIN

TRIBUTARY

LAB SECTION CHAMPAIGN SUPERVISOR

Big Muddy/Beaucoup

PANTHER CREEK

CARD COL

CARD COL

CARD COL

NCCA BASIN CODE

PLANT OR STATION NO

FIPS COUNTY CODE (USE ONLY FOR PLANTS)

LAB ID NO

LAB ID NO

LAB ID NO

SAMPLE TYPE CODE (SEE LIST BELOW)

SAMPLE TYPE CODE

SAMPLE TYPE CODE

YEAR 83

ARSENIC 19 - 22

PLANKTON (NO ML) 19 - 23

MONTH 09

BARIUM 23 - 25

FLUORIDE 24 - 26

DAY 28

BORON 26 - 28

CHLORIDE 27 - 30

HOUR (NEAREST) 01

CADMIUM 29 - 32

SULFATE 31 - 34

TIME OF DAY (A/P) P

CHROMIUM (HEX) 33 - 35

TOTAL SULFUR 35 - 38

WATER TEMPERATURE (DEG F)

CHROMIUM (TRI) 36 - 38

OIL 39 - 42

FIELD DO

CHROMIUM 39 - 41

M.B.A.S 43 - 46

PH (UNITS) 34 - 36

COPPER 42 - 45

CARBON CHLOROFORM EXTRACT 47 - 50

TOTAL PHOSPHORUS 37 - 40

CYANIDE 46 - 49

TURBIDITY (UNITS) 51 - 54

AVG BOD 41 - 44

IRON (T) 50 - 53

RESIDUE ON EVAP. 55 - 58

COD 45 - 48

IRON (DISSOLVED) 54 - 56

VOLATILE SUSP. SOLIDS 59 - 62

PHENOLS 49 - 52

LEAD 57 - 60

COLOR (UNITS) 63 - 65

NO 59

MANGANESE 61 - 63

HARDNESS 66 - 68

AMMONIA N 60 - 63

MERCURY (MICRO GM L) 64 - 66

ALKALINITY 69 - 71

NITRATE + NITRITE AS N 64 - 66

NICKEL 67 - 69

TOTAL ACIDITY 73 - 74

ORGANIC N 67 - 69

SELENIUM 70 - 72

FREE ACIDITY 75 - 77

TOTAL N 70 - 72

SILVER 73 - 76

OTHER TESTS REQUIRED

T.D.S

ZINC 77 - 79

YES (REFERENCE REVERSE SIDE)

F.C. 73 - 76

ALL RESULTS EXPRESSED AS MG/L EXCEPT WHERE OTHERWISE STATED

NO

TOTAL SUSP SOLIDS 77 - 80

SAMPLE TYPE CODES

- A = DOMESTIC WASTE ONLY
E = INDUSTRIAL WASTE ONLY
I = MIXED DOMESTIC & INDUSTRIAL WASTE
S = STREAM, LAKE, OR RECEIVING WATER
T = MINE DRAINAGE OR WASTE
X = OTHER OR TYPE UNKNOWN

SIGN BELOW FOR EFFLUENT SAMPLE

TRANSPORTED BY J. Minton

RECEIVED BY

DATE REC'D TIME REC'D AM PM

TRANSPORTED BY

RECEIVED BY

DATE REC'D TIME REC'D AM PM

Gage Height (for top of ice) or R.P. to W.S.:

Sampling Techniques: GRAB

Flow conditions (velocity etc.) UNK -

Identification Nos on pH and Sp. Cond. meters:

Weather Conditions: WARM, PARTLY CLOUDY

Comments and unusual conditions (indicate severity): WATER SAMPLE CLEAR